

REMARKS

Applicant has carefully considered the Office Action of October 31, 2005 and offers the following remarks to accompany the above amendments.

Before addressing the rejections, Applicant provides a brief summary of the present invention so that the remarks relating to the references are considered in the proper context. The present invention is directed to a modem that has two transformers. The first transformer has three coils. The second transformer, distinct from the first transformer, has two coils. While the transformers are distinct, a coil from the first transformer and a coil from the second transformer are coupled to a receive port of the modem. Likewise, a coil from the first transformer and a coil from the second transformer are also coupled to a transmit port of the modem. The taps from the various coils are well illustrated in Applicant's Figure 1, which likewise illustrates the distinct nature of the two transformers.

Claims 1-4, 8, 13, 14, 16, 18, 22-24, and 27 were rejected under 35 U.S.C. § 103 as being unpatentable over Gardner et al. (hereinafter "Gardner") in view of Rhodes. Applicant respectfully traverses. For the Patent Office to establish *prima facie* obviousness, the Patent Office must show where each and every claim element is located. MPEP § 2143.03. If the Patent Office has to modify a reference to show a claim element, the Patent Office must do two things. First, the Patent Office must articulate a motivation to modify the reference, and second, the Patent Office must support the articulated motivation with actual evidence. *In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992); See also *In re Kotzab*, 217 F.3d 1365, 1370 (Fed. Cir. 2000).

Applicant previously argued that the Patent Office was excising select portions of the references and reassembling these excised portions in an impermissible manner. In response, the Patent Office has provided a new analysis of Gardner. However, this analysis is similarly improper. The claims are relatively simple. Claim 1 recites a first transformer with first, second, and third coils and a second transformer with fourth and fifth coils. Thus, to align with the claim, the reference (or combination of references) must show a first transformer with three coils and a second transformer with two coils. These coils must then be positioned in the paths according to the claims. The Patent Office cannot show this arrangement with the references of record.

Specifically, the Patent Office identifies windings 72 and 74 of Gardner Figure 11 as the second and fourth coils of Applicant's first and second transformers. Windings 72 and 74 are

clearly part of a single transformer (70A) in Gardner. Applicant's claim requires that the second and fourth coils be part of two different transformers. Thus, on face, this interpretation of Gardner does not align with the claim language.

The Patent Office compounds its interpretational errors by asserting that element 81A of Figure 11 has the third and fifth coils of the claim. Again, element 81A is its own transformer with two coils. It is improper to say that a single transformer with two coils is the same as the coils of two different transformers as recited in the claim.

The only way that the Patent Office can align the coils of Gardner with Applicant's claim language is disassembling Gardner's transformer 70A and Gardner's transformer 81A to mix and match the coils contained therein to create Applicant's first and second transformer. The Patent Office provides no analysis as to why someone skilled in the art would make these changes. The Patent Office tries to argue away this deficiency by noting that transformer 70A is coupled to transformer 81A "which forms the receiving path and hence the receiving port (as mentioned above) and is connected to the coil which is considered to be equivalent to applicant's third coil of the transformer (as described above). . . ." (Office Action of October 31, 2005, page 3, lines 10-15). This analysis actually highlights why Gardner does not show the claimed structure.

Transformer 70A has windings 72, 74, and 76, but does not include the windings of transformer 81A. Thus, it is inappropriate to say that Applicant's first transformer comprises a coil from transformer 70A (the Patent Office states that Applicant's second coil is winding 72) and a winding from transformer 81A. Likewise, it is inappropriate to say that Applicant's second transformer comprises a coil from transformer 70A (the Patent Office states that Applicant's fourth coil is winding 74) and a coil from transformer 81A. No one of ordinary skill in the art would consider either distributed set of windings to be a transformer in name, function, or fact.

In short, the Patent Office has not shown the claimed structure in the structure of Gardner, nor has the Patent Office provided any rationale as to why Gardner's structure would be modified to reach the claimed structure. Since the Patent Office has not shown the claimed structure, the Patent Office has not established *prima facie* obviousness. MPEP § 2143.03.

Claims 1 and 22 explicitly recite the various coils in the respective first and second transformers. Thus, claims 1-4, 8, 22-24, and 27 are not obvious for the reasons set forth above. New claim 28 is presented and is dependent off claim 1. Claim 28 makes it explicit that the first and second transformers are distinct from one another. This explicit recitation precludes any

possibility that the distributed transformers of the Patent Office's creation can be equated with the transformers of the claims. As Applicant has previously canceled a claim, the addition of claim 28 should necessitate no new fee.

Claim 13 is rejected based on the Patent Office's analysis of claim 1 without further explanation. While the phrasing of claim 13 is different from that of claim 1, the arrangement of the transformer being coupled to the transmit path and the receive path is not shown. If the Patent Office disagrees, Applicant requests that the Patent Office explain how the various claim elements are shown. Thus, claims 13, 14, 16, and 18 are not obvious.

Claims 5, 15, and 17 were rejected under 35 U.S.C. § 103 as being unpatentable over Gardner and Rhodes in view of allegedly well known transformer equations. Applicant respectfully traverses. The standards for establishing obviousness are set forth above.

As explained above, Gardner and Rhodes do not teach or suggest the claimed invention presented in the independent claims. The addition of the allegedly well known transformer equations does not cure the deficiencies of the underlying combination. To this extent, the combination does not establish obviousness, and claims 5, 15, and 17 are allowable.

Claims 9, 10, 19-21, and 25 were rejected under 35 U.S.C. § 103 as being unpatentable over Gardner and Rhodes and further in view of Beurrier. Applicant respectfully traverses. The standards for establishing obviousness are set forth above.

As explained above, Gardner and Rhodes do not teach or suggest the claimed invention presented in the independent claims. The addition of Beurrier does not cure the deficiencies of the underlying combination. To this extent, the combination does not establish obviousness, and claims 9, 10, 19-21, and 25 are allowable.

Claim 12 was rejected under 35 U.S.C. § 103 as being unpatentable over Gardner and Rhodes and further in view of Beurrier and Gorcea. Applicant respectfully traverses. The standards for establishing obviousness are set forth above.

Gorcea is commonly owned with the present application. Specifically, as is readily apparent, Gorcea is a common named inventor for both the current application and the cited reference. Mr. Gorcea is an employee of Nortel Networks and both applications are assigned to Nortel. The current application is so assigned as evidenced by the assignment recorded at Reel 013136/Frame 0692. Gorcea issued as U.S. Patent No. 6,566,947, which is on face assigned to Nortel. Since the inventions are commonly owned and were so at the time of invention, 35

U.S.C. § 103(c) precludes the use of Gorcea in an obviousness rejection. If the Patent Office disagrees, Applicant requests an explanation for how Gorcea qualifies as prior art. Likewise, if the Patent Office requires additional evidence of the common ownership, Applicant requests that the Patent Office phone the undersigned so that such evidence may be collected and presented expeditiously. Since Gorcea is not available as prior art, the rejection is not properly supported and claim 12 is allowable.

Applicant requests reconsideration of the rejection in light of the remarks presented herein. Gardner and Rhodes do not show the claimed arrangement of coils in the two transformers. Applicant earnestly solicits claim allowance at the Examiner's earliest convenience.

Respectfully submitted,

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